address segment and a second address segment;

a plurality of attribute sets, each said attribute set including a series of cells having the same second address segment, each said attribute set including an object identification number (OID) to identify each said attribute set;

a plurality of records, each said record including a series of cells having the same first address segment, each said record including an OID to identify each said record, wherein at least one of said records has an OID equal to the OID of a corresponding one of said attribute sets, at least one cell in a first record including an annotation such that said annotation cell is fully integrated into said extensible logical table; and

means for performing an operation on said cell including said annotation.

80. (Newly Presented) The system of claim 79 wherein said operation comprises indexing.

81. (Newly Presented) The system of claim 79 wherein said annotation cell includes hypertext.

REMARKS

Applicants have carefully studied the Office Action mailed November 26, 1997, together with the references cited therewith, and have amended the application accordingly.

Claims 1-3, 5-7, 9-10, and 16, are amended and new claims 19-~~XX~~ 81 are added by this amendment to more precisely claim the invention as disclosed in the above named application. Thus, claims 1-81 are pending in this application.

Applicants gratefully acknowledge the indication of the

presence of allowable subject matter in claims 14,15 and 18 if rewritten in independent form including all limitations of the base claim and any intervening claims. Accordingly, claims 14, 15 and 18 have been rewritten as newly presented claims 19-21. Claims 14, 15, and 18 were rewritten to be independent and include all limitations of the base claim and any intervening claims.

Claims 1-18 stand rejected under the judicially created doctrine of obviousness-type double patenting as being over claims 1-56 of U.S. Patent No. 08/383,752. A terminal disclaimer is filed herewith to overcome this rejection regarding pending claims 1-18.

Claims 1-8, 10, 12-13, and 16-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Earle U.S. Patent No. 5,359,724. Regarding claims 1-18, 10, 12-13, and 16-17 and newly presented claims 19-81, Earle is directed to a database that stores multidimensional data in a minimum of memory space. The first step of Earle is to define the database structure by defining the dimensions of the data (col. 7, lines 43-45). The present invention does not define the database structure beyond requiring intersecting rows and columns which form cells and at least one row requiring a fields cell referring to a plurality of labeled columns. The use of the required fields cell referring to a plurality of labeled columns results in a self referential table which is expandable with newly added columns immediately available to existing records (page 15, lines 1-5). Earle does not teach or suggest the use of a field cell to create a self-referential table. Earle teaches away from a fields cell and a self-referential table by requiring a defined database structure as the first step of database creation. By using a fields cell the present invention obtains the unobvious benefit of an ever-expandable database with no fixed format in which newly added columns are immediately available to existing records.

Earle is directed to a database that stores multidimensional

data, Earle teaches using a "block" as its basic storage element. A "block" is defined to be the product of three or more data dimensions, i.e. 10x5x3, or 150 cells (col. 8, line 33). Earle teaches against the use of individual cells as the basic storage unit. The present invention uses a single cell as its basic storage unit (page 14, lines 20-21). Earle must allocate memory for a block that may contain unoccupied individual cells and thus waste memory resources. The present invention only needs to allocate memory for occupied cells thus saves memory resources.

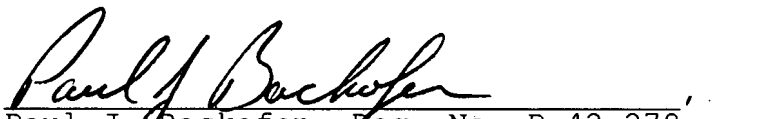
The present invention explicitly supports searching and navigation by the user in various way, such as "attribute sets within attribute sets" referencing, multiple references to other records, and reciprocal referencing. In addition, pointers are revealed to the user (a method is provided to convert text into OID pointers such that the user can insert OIDs into cells without knowing the OID directly). Earle does not teach or suggest storing pointer values in a cell that is visible to the user. The searching processes in Earle are part of the implementation of the database and such are hidden from the user. As such, Earle teaches against the present invention.

Claim 9 stands rejected under 35 U.S.C. § 103 as being unpatentable over Earle U.S. Patent No. 5,359,724 in view of Khoyi U.S. Patent No. 5,421,012. Regarding claim 9 and newly presented claims 19-39, Khoyi does not make up for the deficiencies of Earle. Khoyi is directed to a database for storing and tracking objects, with types, folders, links, etc. Khoyi is specifically designed to organize objects, and therefore does not disclose implementation of arbitrary attribute sets or attribute set definitions. With respect to links, Khoyi defines a structure whereby every object has at least one link to it from a "parent", and there is a single primary parent for each user that acts as a starting point for all searches. In the present invention, links are not required. Khoyi does not disclose converting text into link IDs as in the present invention. The

link IDs in Khoyi are formatted at the discretion of the object manager (see, col. 21, line 34), not uniform throughout the system as in the present invention. Further the Khoyi links point to other records, not attribute sets as in the present invention (as attribute sets do not have OIDs in the Khoyi system). The folders in Khoyi do not contain data directly (col. 10, line 50-52 and col. 21, line 29-30). In present invention, the folders can have any other attribute sets with valid data in them.

Applicant respectfully requests that the Examiner reconsider the rejections contained in the present Office Action in light of the changes, the new claims, and the remarks presented herein and allow the claims, and pass this case to issue.

Respectfully Submitted,
Irell & Manella LLP



Paul J. Backofen, Reg. No. P-42,278

Irell & Manella LLP
1800 Avenue of the Stars, Suite 900
Los Angeles, CA 90067-4276

(310) 277-1010
(310) 203-7199 Facsimile
pbackofen@irell.com